Eureka Math

3rd Grade
Module 5
Lesson 5

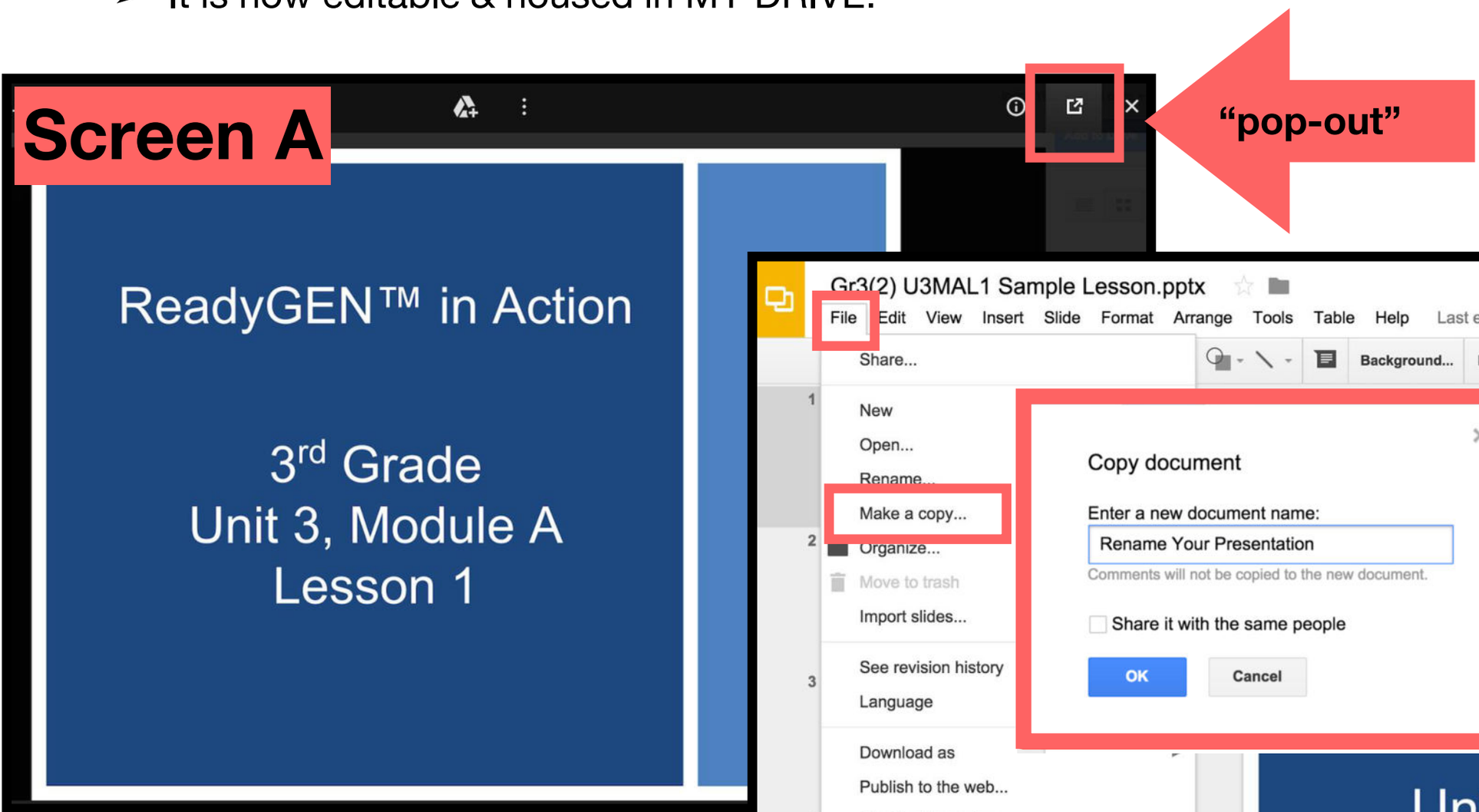
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

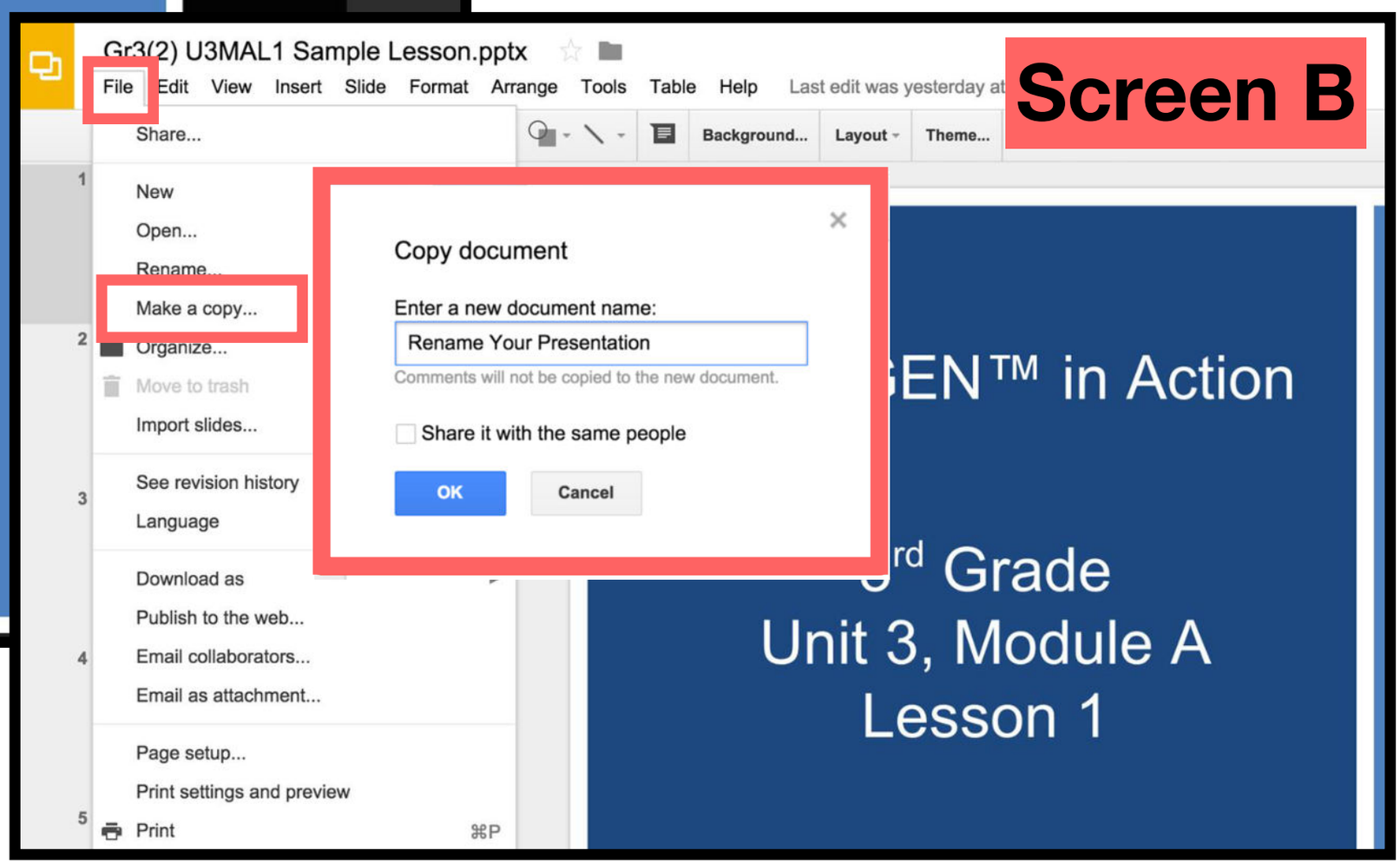
Directions for customizing presentations are available on the next slide.

Customize this Slideshow

Reflecting your Teaching Style and Learning Needs of Your Students

- When the Google Slides presentation is opened, it will look like Screen A.
- Click on the “pop-out” button in the upper right hand corner to change the view.
- The view now looks like Screen B.
- Within Google Slides (not Chrome), choose FILE.
- Choose MAKE A COPY and rename your presentation.
- Google Slides will open your renamed presentation.
- It is now editable & housed in MY DRIVE.





Icons

Read, Draw, Write

Learning Target

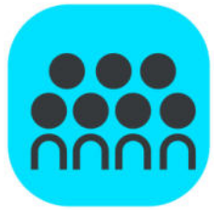
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

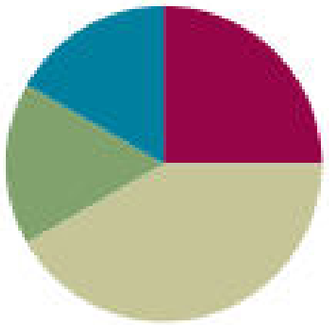
Small Group Time

Lesson 5

Objective: Partition a whole into equal parts and define the equal parts to identify the unit fraction numerically.

Suggested Lesson Structure

Fluency Practice	(15 minutes)
Application Problem	(10 minutes)
Concept Development	(25 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



Fluency Practice (15 minutes)

- Count by Eight **3.OA.7** (5 minutes)
- Write the Fractional Unit **3.NF.1** (5 minutes)
- Partition Shapes **3.NF.1** (5 minutes)

I can partition a whole into equal parts and define the equal parts to identify the unit fraction numerically.

Fluency Practice

Group Counting

Count by 8's

Let's see how high we can count by eights in 90 seconds...

Fluency Practice

Group Counting

Write the Fractional Unit

Write the fractional unit on your whiteboard.

Fluency Practice

Group Counting

Write the Fractional Unit

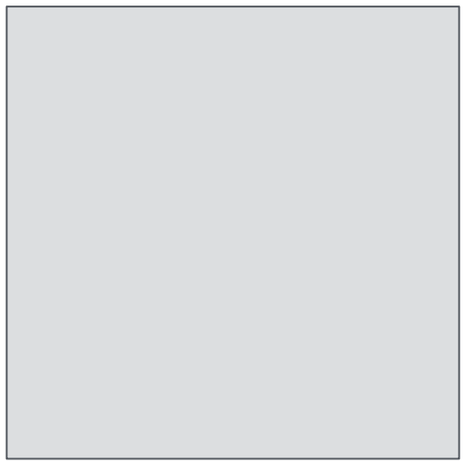
Write the fractional unit on your whiteboard.

Fluency Practice

Group Counting

Partition Shapes

Draw a square



Estimate to partition the square into equal halves.

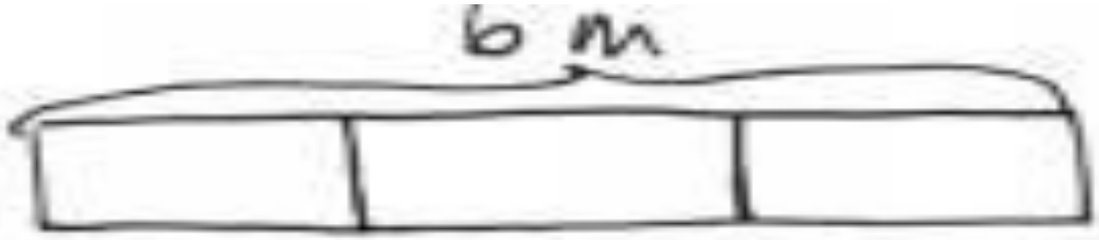
Application Problem

Ms. Browne cut a 6-meter rope into 3 equal-size pieces to make jump ropes. Mr. Ware cut a 5-meter rope into 3 equal size pieces to make jump ropes. Which class has longer jump ropes?

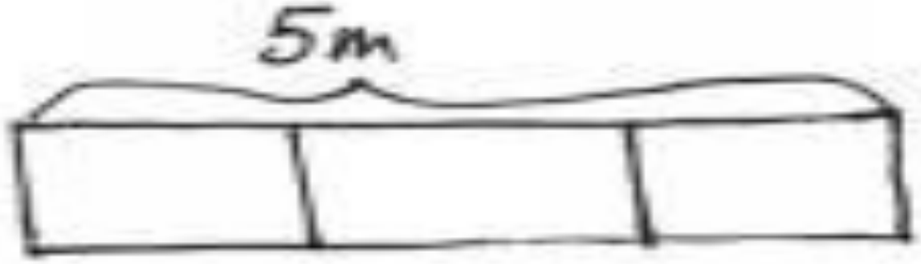
Extension: How long are the jump ropes in Ms. Browne's class?

Application Problem

Ms. Browne



Mr. Ware



Ms. Browne's class gets longer jump ropes because the original rope was longer.

Extension: The jump ropes in Ms. Browne's class are 2 m long because I can count by 2 until I get to 6 m.

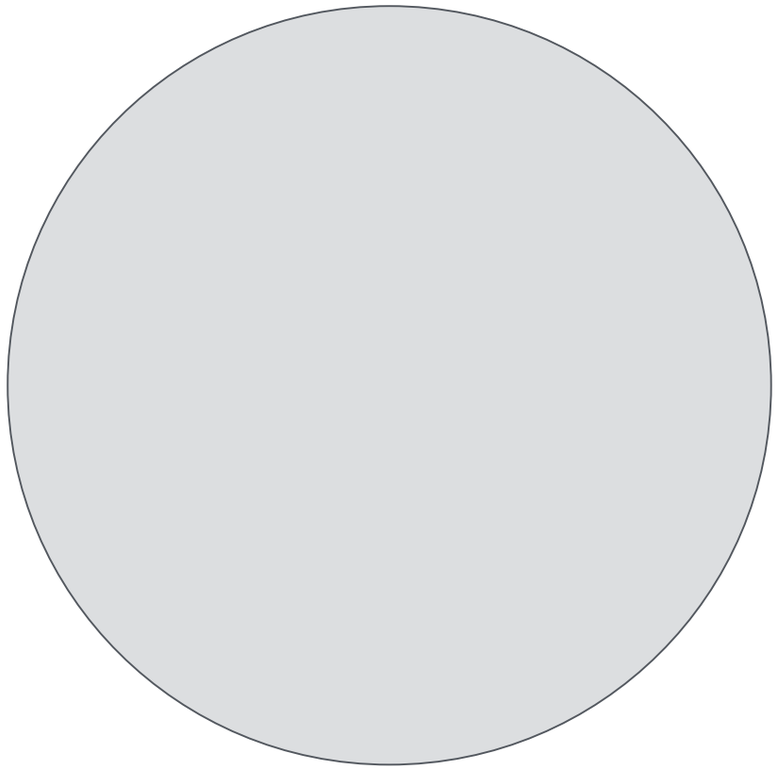
Concept Development

Materials

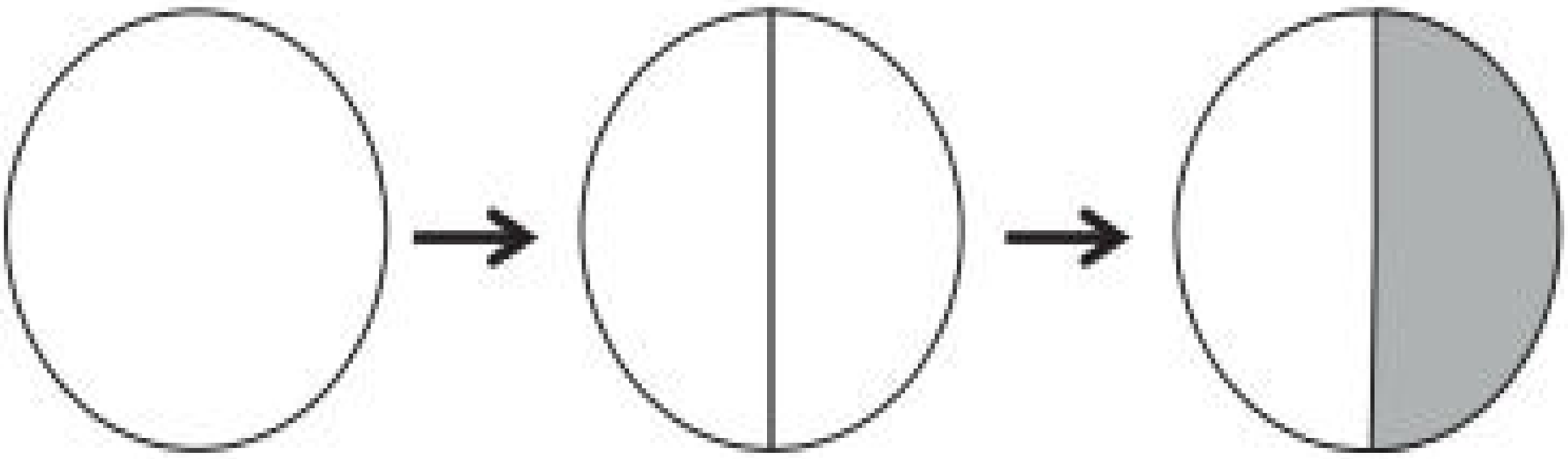
Personal whiteboard

Concept Development

Whisper the name of this shape.

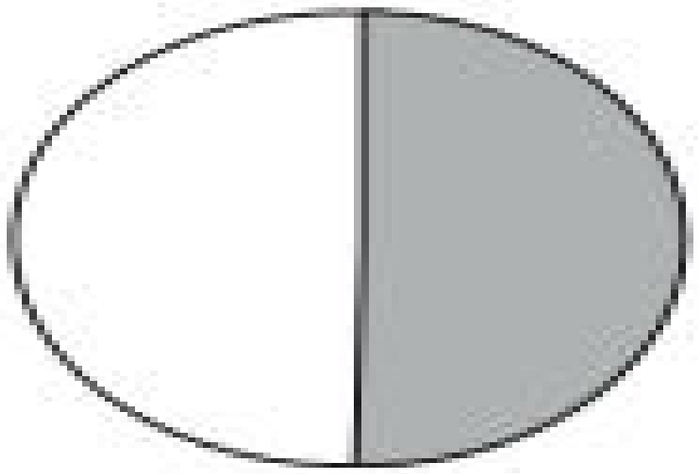


Concept Development



A line has been drawn to partition the circle. What is the name of each unit? What fraction is shaded?

Concept Development

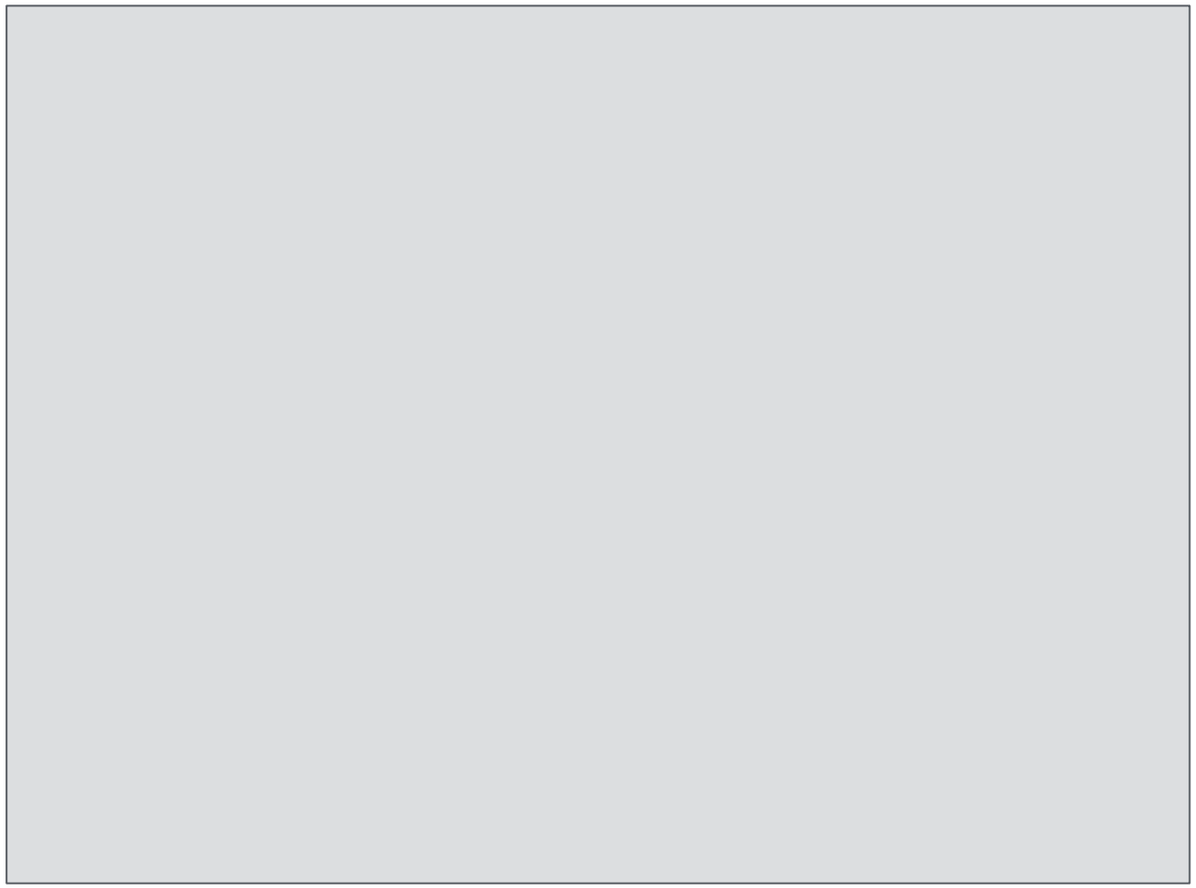


1 half; $\frac{1}{2}$

Just like any number, we can write one half in many ways. The unit form is 1 half. The fraction form is ½. Both of these refer to the same number, 1 out of 2 equal units. We call 1 half a unit fraction because it names one of the equal parts.

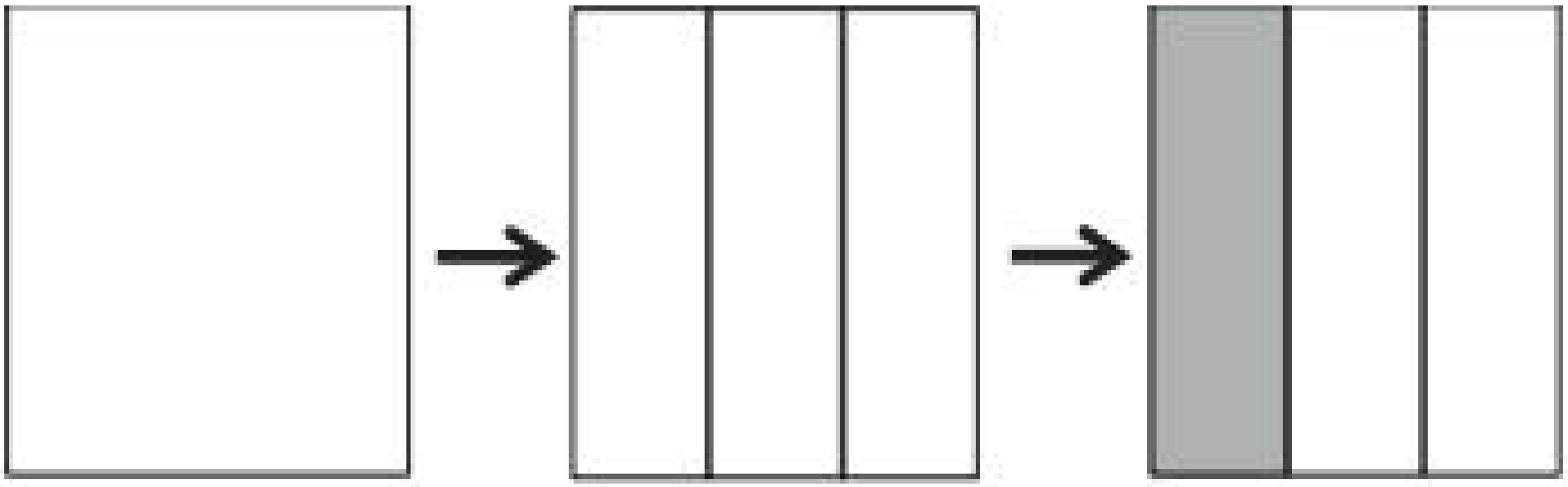
Concept Development

What is the name of this shape?



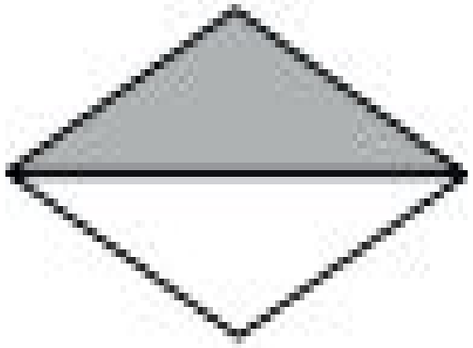
Draw it on your whiteboard and estimate to partition the square into 3 equal parts.

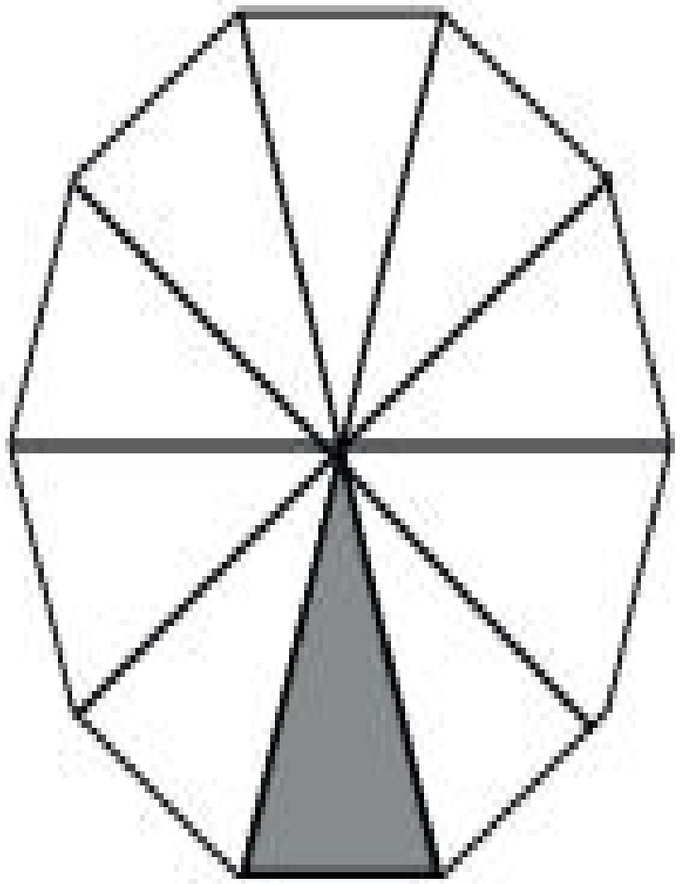
Concept Development

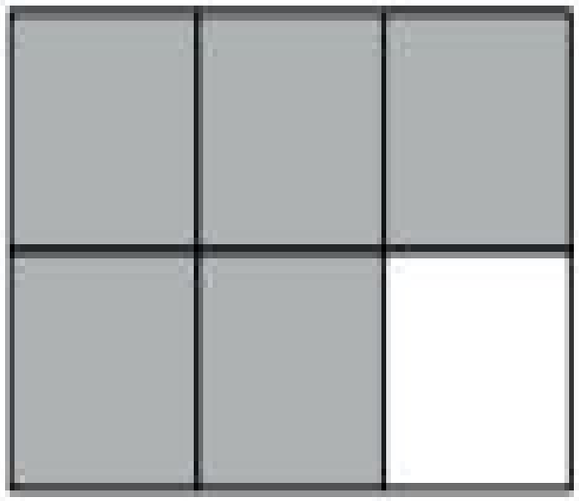


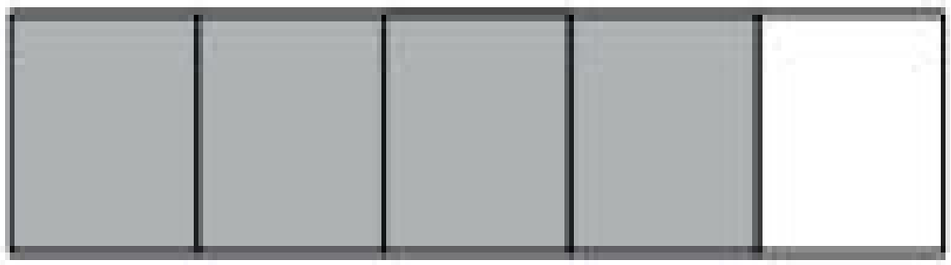
Shade and write 1 third and 1/3

Concept Development



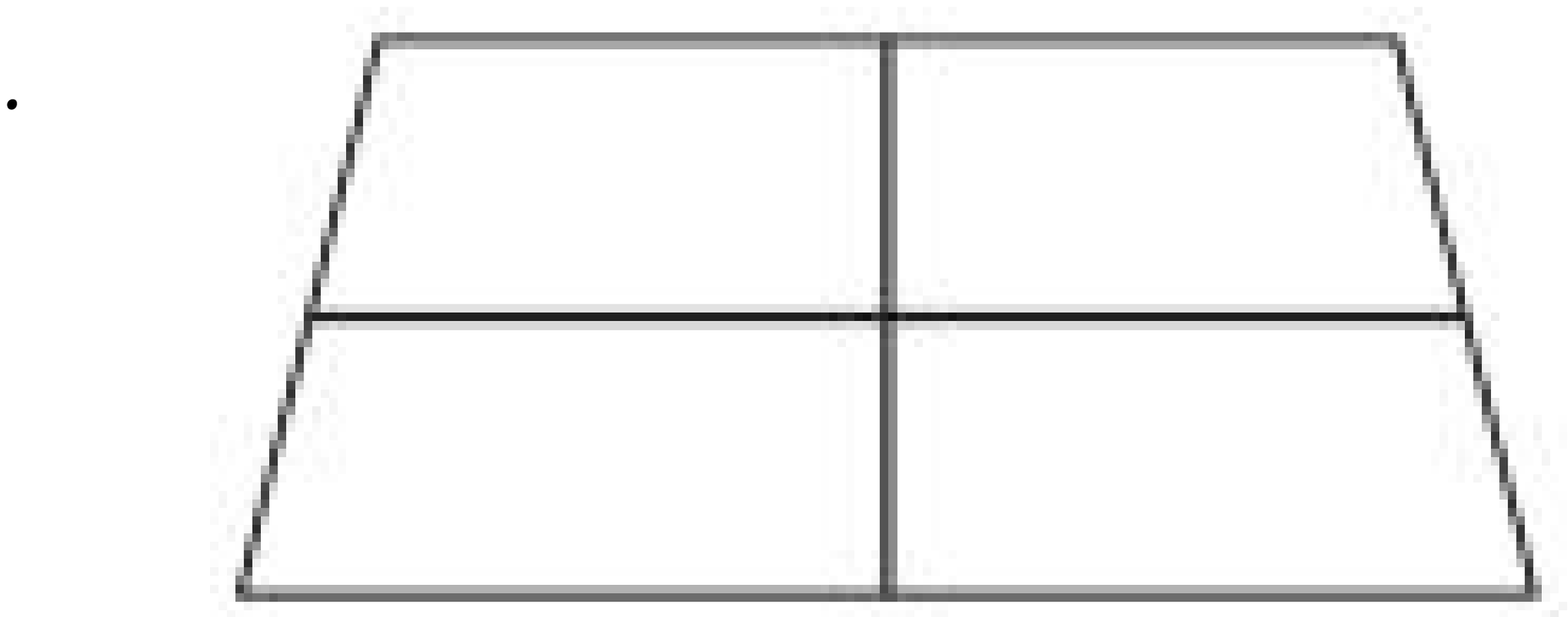




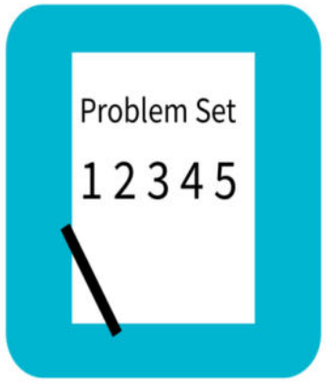


Draw and write the unit form and fraction form for each shape.

Concept Development

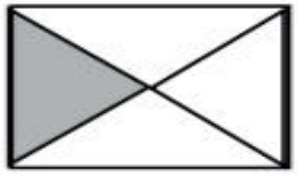
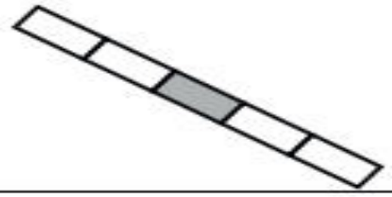
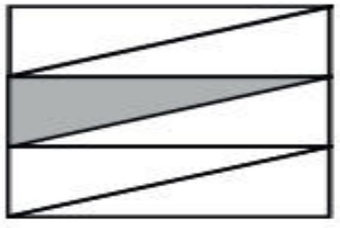
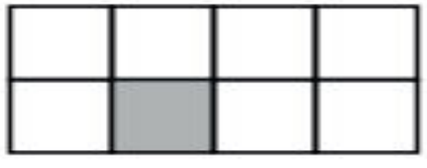


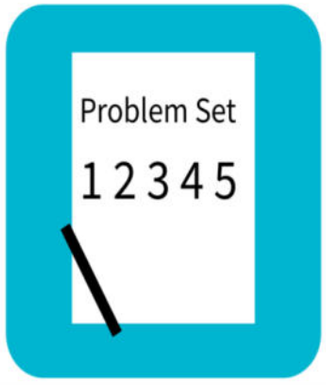
Discuss with your partner: Does the shape have equal parts? How do you know?



Problem Set (10 mins.)

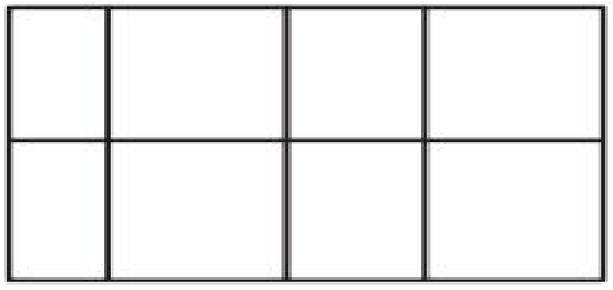
1. Fill in the chart. Each image is one whole.

	Total Number of Equal Parts	Total Number of Equal Parts Shaded	Unit Form	Fraction Form
a. 				
b. 				
c. 				
d. 				
e. 				
f. 				



Problem Set (10 mins.)

2. Andre's mom baked his 2 favorite cakes for his birthday party. The cakes were the exact same size. Andre cut his first cake into 8 pieces for him and his 7 friends. The picture below shows how he cut it. Did Andre cut the cake into eighths? Explain your answer.



3. Two of Andre's friends came late to his party. They decide they will all share the second cake. Show how Andre can slice the second cake so that he and his nine friends can each get an equal amount with none leftover. What fraction of the second cake will they each receive?

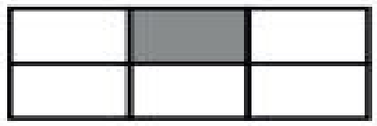
4. Andre thinks it's strange that $\frac{1}{10}$ of the cake would be less than $\frac{1}{8}$ of the cake since ten is bigger than eight. To explain to Andre, draw 2 identical rectangles to represent the cakes. Show 1 tenth shaded on one and 1 eighth shaded on the other. Label the unit fractions and explain to him which slice is bigger.

Debrief

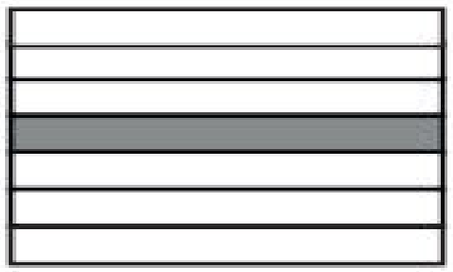
- Are the numbers in Problem 1 unit fractions? How do you know?
- Use the following possible introduction to start a discussion about Problem 4: Let's imagine we're at Andre's birthday party. Who would rather have an eighth of the cake? Who would rather have a tenth? Why? The following are some suggested sentence frames:
  - "I would rather have a _____ because _____."
  - "I agree/disagree because _____."
- Guide students to begin understanding that a greater number of parts results in smaller pieces.

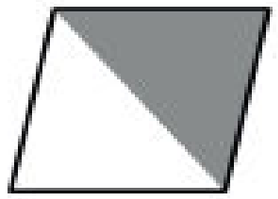
Exit Ticket

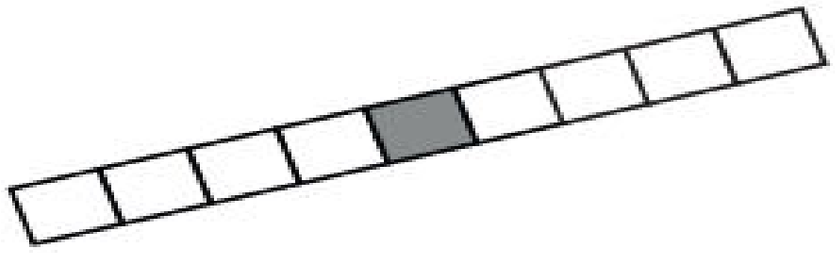
1. Fill in the chart.

	Total Number of Equal Parts	Total Number of Equal Parts Shaded	Unit Form	Fraction Form
				

2. Each image below is 1 whole. Write the fraction that is shaded.







3. Draw two identical rectangles. Partition one into 5 equal parts. Partition the other rectangle into 8 equal parts. Label the unit fractions and shade 1 equal part in each rectangle. Use your rectangles to explain why $\frac{1}{5}$ is bigger than $\frac{1}{8}$.